

ADDRESSING STUDENT DISHONESTY IN ASSESSMENT

ISSUES PAPER FOR UQ ASSESSMENT SUB-COMMITTEE

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Executive Summary

Academic integrity is a consistent matter of importance in tertiary education. Risks posed by weak assessment integrity are serious and far-reaching so it is important that universities are informed about current trends. Recent media reports of student assignment purchasing uncovered at several Australian Universities (and overseas) increases the urgency for universities to provide considered responses to all parties. This paper addresses the idea of student dishonesty in assessment, particularly related to UQ, with a focus on the need to verify that a student has genuinely done the work for which they obtain UQ credit. It frames the problems faced by universities around student dishonesty in assessment, the risks UQ face from poor assessment integrity, the individual and contextual factors that influence student misconduct, and potential strategies to engender a culture of excellence in academic honesty across the campuses at UQ.

Current strategic responses to addressing student dishonesty in assessment found in scholarly literature and an environmental scan of other university practices include:

- Ensuring robust policies are in place around misconduct
- Supporting academics as they investigate misconduct
- Taking appropriate punitive action against misconduct
- Strengthening administration structures and practices
- Building an institutional culture of integrity and encouraging honour codes
- Educating students and staff
- Strengthening assessment design for student identify verification
- Exploring technological solutions

Each of these strategies are discussed in turn. The authors pose a number of checklist questions for UQ at the end of each section to give opportunity to reflect on our current and future responses to student dishonesty in assessment in particular, and more generally on our approach to sustaining a positive culture of academic integrity across the University.

There is no one easy solution or technique in addressing the increasing sophistication of resources available to students who choose to complete assessment dishonestly. Rather, iterative and holistic institutional responses are required by UQ as it strives for excellence in the area of assessment integrity.

The paper concludes by offering evidence-based options for a multi-faceted approach to combatting student dishonesty and maintaining trustworthy, high-quality assessment at UQ.

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A Presentation of the Problem and UQ Context

The term ‘assessment integrity’ can apply to a variety of issues around assessment that touch on reliability, validity, transparency and equity. We can be concerned, for example, about aspects of assessment that could be classed as academic responsibilities: such as the design of assessment tasks; the quality of marking rubrics; equitable marking for students in group assessment; the provision of feedback; disciplinary norms and standards across the university; and moderation of marks.

We can also be concerned about aspects of assessment classed as student responsibilities which fall under the coverall term of ‘student dishonesty’ in assessment. By this we mean students’ unethical practices around assessment including activities that can be variously termed ‘cheating’, ‘plagiarism’, ‘fabrication’, ‘facilitation’, ‘misrepresentation’, ‘contract cheating’, ‘misattribution’, ‘neutralisation of ethics’, ‘situational ethics’, and ‘academic sabotage’ (Pavela 1978; Whiteley & Keith-Spiegel 2002; Walker & Townley 2012).

Academic integrity is a consistent matter of importance in tertiary education. Recent media reports of student assignment purchasing uncovered at several Australian universities (and overseas) increase the urgency for universities to be informed and provide considered responses to all parties (see Appendix A for links to newspaper articles). For example, in response to the *MyMaster* reports, TEQSA asked these identified institutions to report on their investigative and remediation actions. In addition, all higher education providers were asked to share their best practice strategies in mitigating student dishonesty in assessment and promoting academic integrity (TEQSA 2015). Although UQ was not one of the institutions where assignment purchasing was publicly exposed, it is realistic to assume that the practice of purchasing assignments from commercial online writing services is happening at UQ. In addition, students are colluding on and plagiarising work in other ways. They are able to submit this work in a manner that evades detection at UQ. These practices pose a risk for the reputation of UQ, to its students and to the general public.

This paper will address the idea of student dishonesty in assessment, particularly related to UQ, with a focus on the need to verify that a student has genuinely done the work for which they obtain UQ credit. It frames the problems faced by universities around student dishonesty in assessment, the risks UQ faces from poor assessment integrity, the individual and contextual factors that influence student misconduct, and potential strategies for future responses. It also discusses how to engender a culture of excellence in academic honesty across the campuses at UQ by drawing on scholarly research and examples of good practice from other universities.

UQ policies and practices

UQ has articulated its policy about integrity of assessment through the PPL section 3.10.02 Assessment. The University clearly states that assessment is a ‘developmental learning activity’, a ‘mutual responsibility’ between the student and the teacher, and that it should ‘provide comprehensive, accurate, consistent and dependable certification of student achievement’. In addition, the University states that ‘the content, format and conduct of assessment are designed to ensure that no individuals or groups of students are unfairly advantaged or disadvantaged’. Clearly in cases of student misconduct, one student has an unfair advantage over another, which is not acceptable at UQ.

Student misconduct is dealt with under the PPL section 3.60.04 Student Integrity and Misconduct. This section of the PPL is currently under review. Students can access the PPL freely and additional information is provided for students at the *myAdvisor* site (<http://www.uq.edu.au/myadvisor/academic-integrity-and-plagiarism>). To increase awareness of academic misconduct issues, UQ advises students to complete an Academic Integrity Online Tutorial. The *myAdvisor* site states that this tutorial is compulsory, and that non-compliance will result in receipt of a reminder until the tutorial is completed. *myAdvisor* does not make any statements about further action if the tutorial is not completed and in practice, the tutorial is not compulsory as non-compliance is not followed up by punitive action.

The PPL defines multiple terms around integrity, including 'academic integrity', 'misconduct', 'cheating', 'collusion', and 'plagiarism'. The PPL also explains the decision-making process around student misconduct and describes the penalties available to the University if misconduct is detected and substantiated.

Currently, student academic dishonesty incidents at UQ are addressed through the process described in PPL 3.60.04. Instances of detected misconduct are classed as Level 1, 2, or 3 and different levels of authority are required to impose penalties for these activities. Level 1 misconduct (the lowest level) can be dealt with by the Head of School, Level 2 misconduct is addressed by the Executive Dean, and Level 3 misconduct is addressed by the UQ Disciplinary Board. In rare instances of misconduct the student may have a criminal case to answer – in such a situation the matter is referred to the police. The investigation and prosecution of academic dishonesty takes significant time and effort on the part of the University. The administrative burden begins at the level of initial reporting and investigation; for a very straightforward case this process takes approximately 1.5 hours of time per reported student for the reporting academic. More complicated cases, where investigative work is required to establish a case, can take much longer.

Both students and staff can obtain information about the process of misconduct investigations and penalisations from the Student Complaints and Grievance Resolution team within the Academic Administration Directorate (see <http://www.asd.uq.edu.au/student-integrity-students>). This team provides information for students and staff on the University's Student Integrity and Misconduct policy and processes through personal consultation and through a Frequently Asked Questions section on the website. It also provides a central point for information on the University's procedures for dealing with student grievances.

Student Misconduct in Assessment

Contemporary student academic dishonesty practices range in severity from unintentional or minor plagiarism, to methods used to avoid detection by anti-plagiarism software (see Jones & Sheridan 2015), then to more serious online purchasing of individualised assignments (known as contract cheating) and student identity fabrication online or in-person. 'High tech' cheating practices are rapidly advancing in sophistication, thus multiplying the opportunity of academic dishonesty in assessment (Lancaster & Clarke 2008). Modern high-tech cheating takes many forms according to Fisher et al. (2016) as 'cheating students can enjoy the anonymity of the Internet, SSL web-based payment systems, encryption, and cloud technologies ...[and]... their "ghosts" take exams and quizzes, write papers, and complete entire classes' (p. 62). Technological advances also enable student misconduct in face-to-face assessment – examples are the use of mini scanners the size of a pen, or the use of minute cameras, microphones and hearing aids to collude with another party outside the exam room (Kelley & Dooley 2014) (see Appendix A media report 'Thai university

students caught using spy cameras, smartwatches to cheat on medicine exam' for a very recent example of this practice). As a result of the technology boom the extent of student misconduct is hidden and this makes appropriate institutional responses difficult.

Individual and contextual factors that influence student misconduct

A number of researchers have explored the reasons why students cheat and generally suggest there are both individual and contextual influences. Undergirding the cheating decision-making process is what Kelley and Dooley (2014, n.p.) describe as an ambiguous 'gray area' in which situational ethics play a role. Results of the survey of 52 engineering students' attitudes towards cheating by these authors indicates that students believe that copying from a friend, for example, is not acceptable. They do believe, however, that copying answers from an answer manual is appropriate, since this resource is designed to help students get solutions for problems. An additional issue is now the availability of sophisticated online contract cheating websites which persuasively offer to help students; a process that can numb students to ethical considerations and normalise unethical behaviour.

Student respondents in the 1995-1996 survey by McCabe, Trevino and Butterfield (1999) report that unclear ethical areas in cheating include definitional differences, unintentional cheating, and societal acceptance. Individual influencing factors revealed in this same survey include:

Intense academic and family expectations and pressures, societal expectations, the desire to excel, the pressure to get high grades, the pressure of getting a good job or gaining acceptance into graduate school, high levels of stress, a highly competitive environment, laziness, lack of preparation, and apathy (p.224).

Further, a cross-institutional survey by McCabe and Trevino (1997) found that peer attitudes and behaviour were the most influential variables in whether a student acts dishonestly in assessment or not.

The Risks Posed by Poor or Weak Assessment Integrity for UQ

There are several serious and wide-reaching risks involved if poor and weak assessment integrity practices occur at UQ. These are outlined briefly below:

Risk of damage to the reputation of UQ and its students: The University faces the prospect of graduating students who have not personally and individually demonstrated the UQ graduate attributes or met the standards expected for their discipline. Although no university can guarantee that all graduates are of the same standard, we should be able to guarantee that students have achieved a minimum standard. Since each graduate is an ambassador for UQ, the prospect of students graduating with a degree gained using dishonest assessment submissions poses a reputational threat for UQ.

Risk of damage to the professional pride and morale of academics: Academics spend a significant amount of time marking assignments and giving feedback. If they are marking assignments that have been completed using dishonest means they no longer have a believable or useful source of feedback about the effectiveness of their teaching and the quality of their students' learning. This hampers course improvement while disempowering and disillusioning the academic as a teacher and mentor for students.

Risk of meaningless course and teacher evaluations: If students are giving feedback on a course for which they did not actually complete the assessment there are justifiable concerns about the value of that feedback to academics and the University.

Equity issues for students: Students who complete assignments themselves can be disadvantaged in comparison to students who cheat. Students who, for example, buy assignments, have more time to commit to paid work and extra-curricular activities. They also have more opportunity to devote time to University-related activity such as lectures and assignments that are verified as individual work. Students who buy assignments also have more time available to study for exams (Sharman & Wilshire 2007).

The competency of students who cheat is probably not measured accurately and they may be ill-prepared for more complex study or application of prior knowledge (Brimble & Stevenson-Clarke 2005)

Personal Development of Students: If student cheating is not addressed appropriately by an institution students are encouraged to think dishonest behaviour is appropriate. This, in turn, can negatively influence students' ethical and moral development (Whitley & Keith-Spiegel 2002).

Risk of danger to the community associated with under-qualified graduates: Graduates should be able to demonstrate the UQ graduate attributes in an individual, verified manner before they are certified as competent to practice a profession or work in a disciplinary area. In the absence of consistent use of high-integrity assessment there is a risk that UQ will graduate students who are not competent in certified areas of expertise. These graduates pose a risk to their clients, their employers, and to themselves (see Brimble & Stevenson-Clarke 2005; Lin & Wen 2006; Kelley & Dooley 2014).

Addressing Student Dishonesty in Assessment and Increasing Academic Integrity

Current strategic options taken from scholarly literature and an environmental scan of other university practices include:

- Ensuring robust policies are in place around misconduct
- Supporting academics as they investigate misconduct
- Taking appropriate punitive action against misconduct
- Strengthening administration structures and practices
- Building an institutional culture of integrity and encouraging honour codes
- Educating students and staff
- Strengthening assessment design for student identify verification
- Exploring technological solutions

The following sections address each of these options in turn and pose checklist questions for UQ to give opportunity to reflect on our current and future responses to student dishonesty in assessment. In particular, readers can consider the UQ approach to sustaining a positive culture of academic integrity. A summary of all checklist questions can be found in Appendix B.

Ensuring robust policies are in place

When investigating the contract cheating phenomenon Lancaster and Clarke (2008) suggest that institutional policies may be outdated, relying on word matching software which does not have the capacity to capture individualised work produced by contract cheating sites. Therefore, these

authors suggest that institutional regulation should ‘be moving towards a system where the onus is placed on the student to be able to prove that work is their own’ in assessment (Lancaster & Clark 2008, p. 156). Policies need to be clear statements for all stakeholders with stated consequences of inappropriate behaviour. An analysis of academic integrity policies from 39 Australian universities as part of the ALTC-funded *Academic Integrity Standards Project: Aligning Policy and Practice in Australian Universities 2010-2012*, found that:

- 51% of the policies had ‘misconduct’ and ‘plagiarism’ as their key terms
- 41% had ‘academic integrity’ as a key term
- 28% had a mixed approach of both educative and punitive elements.
- Only 39% of policies identified the institution as being responsible for academic integrity

Source: <http://www.aisp.apfei.edu.au/content/research-findings>

Regarding information about types of breaches and associated penalties, the authors found:


- only 44% provided details relating to severity of breaches (minor/major)
- most breaches were not defined
- in 18% no breach outcomes were stated

Source: <http://www.aisp.apfei.edu.au/content/research-findings>

This national policy analysis also found that 20 per cent of university academic integrity policies did not mention HDR students and only eight of the 39 had discrete HDR student policies (Mahmud & Bretag 2013). These authors suggest that is assumed that HDR students have a solid understanding of academic integrity that will stand them in good stead under the pressures of postgraduate study but this may not be the case (Mahmud & Bretag 2013).

The table below outlines five core elements of exemplar academic integrity policy drawn from this national study:

Table One: Five Core Elements of Academic Integrity Policies

Element	Description	
Access	Easy to locate, readable, clear and concise, downloadable as one document.	
Approach	Educative, provides context, purpose and institutional values of academic integrity.	
Responsibility	Clear identification of stakeholder responsibilities, from institution to individual.	
Detail	Outlines descriptions of all possible academic integrity breaches in categories by severity. Possibility of flow charts to describe processes involved.	
Support	Practical, long-term support through procedures, training, PD, resources to facilitate understanding of the policy.	

Source: Bretag et al. (2011, pp.6-7)

Research undertaken by Duck and Hamilton (2010) in the ALTC Priority Project, *Assessment policy and impact on practice: Sharpening the policy review process in Australian universities*, made a number of recommendations that could be applied to academic integrity and student dishonesty in assessment policy development, as follows:

- Universities must have an overarching policy position on **[academic integrity and student academic dishonesty in assessment]** that articulates a clear aspirational vision for the role of [academic integrity] in higher education.

- The aspirational vision must locate **[academic integrity]** as the linchpin of the curriculum, rather than an add-on, and emphasise [academic integrity] for learning and for building capacity beyond the university experience
- Policy statements on **[academic integrity and student academic dishonesty in assessment]** should be developed from the ground up and reflect active inclusion of students as well as the voices and experiences of all those responsible for teaching
- Universities should be encouraged to collaborate around the development of **[academic integrity]** policy and the review and renewal of those policies. This would be facilitated by the establishment of additional opportunities for the establishment of a community of practice around **[academic integrity]** policy.

Source: <http://www.uq.edu.au/teaching-learning/assessment-policy-and-impact-on-practice-sharpening-the-policy-review-process-in-australian-universities-149243>

Other useful resources include:

Recommendations for policy changes in the University of Sydney's Taskforce Report: Part 1, p. 6.
Student Research Misconduct in the University of Sydney's Taskforce Report: Part 2, pp. 12-18
http://sydney.edu.au/elearning/student/EI/AMP_taskforce.shtml

The *Exemplary Academic Integrity Project* website which provides resources for academic integrity policy development, support resources for students with English as a second language, and an evidence-based policy and support framework for HDR students.
<https://lo.unisa.edu.au/course/view.php?id=6751&topic=0>

Checklist Question for UQ

Are UQ policies up-to-date in order to be:

- (i) Relevant and responsive to addressing new forms of contract cheating and plagiarism,**
- (ii) Relevant and responsive to new student behaviours associated with such cheating, and**
- (iii) Inclusive of all student cohorts?**

Supporting academics as they investigate misconduct and taking appropriate punitive action

Two reasons that plagiarism is inadequately addressed in universities are the potential risk of litigation and academic unease with undertaking somewhat painful investigation processes, given that the punishment handed down may be light (Sharman & Wilshire 2007). Indeed, a survey of faculty reported in McCabe and Trevino (1995) found that half of the respondents would not proceed with reporting cheating through institutional procedures, even if they had undisputable proof of misconduct. These authors comment that students seemed aware of this dilemma, which indicated to them that they could cheat with impunity.

A survey of psychology educators by Keith-Spiegel et al. (1998) found that respondents considered addressing student academic dishonesty as 'among the most onerous aspects of their profession' (p. 215) with inadequate proof being the most common reason for overlooking cheating. Other reasons included stress, the time and effort involved, fear of retaliation, and the belief that students who cheat will fail even if their behaviour is not addressed, and those who are 'good' at cheating will not get caught.

UQ needs to consider whether it is consistently enacting the outcomes of current policy statements and whether students experience appropriately negative consequences of inappropriate academic behaviour, given the amount of academic time that is expended on detecting and prosecuting cheating. Students who are not punished for their misconduct continue to have an unfair advantage over honest student peers (Dee & Jacob 2010). Punishment displayed as a consequence will provide a stronger incentive to students to understand what constitutes plagiarism and how they can avoid it (Dee & Jacob 2010). It also serves to encourage honest students because they know that dishonest students are being caught.

The Australian university case study outlined below shows that cheating is happening with significant numbers of students and that detection of the misconduct requires a large amount of time on the part of the academic who chooses to report it.

Checklist Questions for UQ

Does UQ adequately provide support for academics who need to spend time investigating misconduct cases?

Does UQ know how many students are suspected of cheating vs how many are investigated?

Would more support increase the amount of misconduct reported and improve academic morale around investigating student dishonesty?

Would schools or faculties benefit from administrative help to collect evidence associated with cheating (or which suggests cheating) to help academics build a case against dishonest students? If so, should this administrative help be centralised or embedded in the schools or faculties?

Case Study : Unusual Improvements in English Skills

Paraphrased from Rogerson (2014)

1) Who were the students? This case occurred with 102 students in two classes that formed part of post-graduate degree program for international students at the University of Wollongong Business School.

2) What were the assessment items? Two sets of assignments were involved. Students were caught cheating on the first assignment and prosecuted. Students were caught cheating on the second assignment, despite the prosecutions carried out in relation to the first assignment.

3) How was the misconduct detected? While grading the first assignments a large number of anomalies were detected in the standards of referencing and English used, which resulted in a higher number of fail results compared to other instances of the subject over the previous five years.

4) How was the misconduct addressed? Short discussions (3-5 minutes) were conducted with students where inconsistencies were highlighted, and learning support referrals initiated. During two of these interviews students admitted to not writing their own assignments. Both were identified through a comparison of the submissions from their previous attempt at the subject and the apparent vast improvement in English language expression in the new submission. The students were duly reported, investigated and penalised under University of Wollongong Academic Integrity and Plagiarism Policy processes (<http://www.uow.edu.au/about/policy/UOW058648.html>).

After the poor results in the first assessment task a large amount of lecture and tutorial time was devoted to preparing students for the second assignment. Academics outlined how to address errors found in the first assignments, particularly in the identification, use and recording of quality references and sources. Additional consultation sessions and email support were offered to students, but few accessed these opportunities.

5) Did these measures improve the situation? What did the university do? Despite the remediation just described, a review of the *Turnitin* originality reports indicated that multiple discrepancies still existed in the second assessment task submissions. The inconsistencies could be categorised into distinct groups. Some students showed vast improvement between the first and second assignments despite their apparent lack of use of learning support or consultations – these assignments were so generic the specific assignment question had not been addressed. Turnitin detected matches between the submissions of these students and between the submissions and materials on the Internet. Others showed reference details that were in conflict with the information discussed in the assignment, or that were clearly incorrect due to the information presented at the end of the assignment.

The range of irregularities was identified early on in the grading process. To confirm the observations the assignments were double marked by the lecturer to re-examine the papers given the emerging patterns. Due to the volume and complexity of issues, an interview template was prepared to note concerns relating to each assignment such as the ‘telling cues as obvious shifts in diction and surprising levels of sophistication’ (Abasi, Akbari & Graves, 2006). Other issues documented were the misuse or misrepresentation of references and failure to use specific examples to support arguments as required in the assignment question.

In accordance with university policy when irregularities are identified within an assignment submission, all students were interviewed to determine if there was a reasonable explanation for variances, or if further action was required under the University of Wollongong academic integrity and plagiarism policy processes.

6) What was the outcome? This case study did not report the outcomes for these students. In 2015 one student was stripped of their degree from the University of Wollongong for using the *MyMaster* website, which is a contract cheating website that was publically identified in the press (see <http://www.illawarramercury.com.au/story/3112936/uow-student-cheat-stripped-of-degree/>). It is not known if this student is one who was involved in the case study event.

Strengthening administration structures and practices

UQ does have a central system that records instances of misconduct convictions and poor academic practice warnings. This system is managed by the Students Complaints and Grievance Resolution team in the Office of The Academic Registrar. UQ Integrity Officers can ask the team to reveal the conviction and poor academic practice status of students using the studentconduct@uq.edu.au email. These data give the Integrity Officer pointers as to the prior behaviour of a student, which is helpful when an investigation begins. The records in the Office of The Academic Registrar currently do not give an indication of how many times a student has been investigated without conviction or warning.

It is reasonable to assume that a student who is 'good' at cheating will be more likely to use methods that are hard to detect, or they will use cheating methods in a sophisticated way (e.g. using a contract cheating site under a pseudonym). Such students are currently cheating 'under the radar', because if they are investigated it is unlikely that a poor academic practice warning can be substantiated or issued. Catching these students is very important and the ability to determine whether a student has been previously investigated, upon suspicion of cheating in another course, would likely increase academic willingness to spend precious time gathering evidence around potentially illegal student behaviour.

We suggest that there may be a role for recording of misconduct investigations (as well as convictions), more public disclosure of student misconduct, and more explicit advertising of the University's responses to misconduct. Publicity is likely to deter students from cheating and encourage reporting and investigation of potential misconduct by academics. Two examples are provided below of university central recording keeping systems that can consistently record and provide reports on student academic misconduct to multiple audiences.

Recordkeeping Examples of Student Academic Misconduct Griffith University

In response to increased public concerns about student misconduct in 2006 the University reviewed its practices and introduced a trial of an *Academic Integrity Framework* over the period 2007-2010. Their website states that the introduction of this framework has resulted in more reported academic misconduct cases and the system has effectively recorded concerns and identified repeat offenders.

A summary of investigation data for 2008-2014 is publically available at:

<https://intranet.secure.griffith.edu.au/teaching/academic-integrity-staff/statistics>

Details of their framework and further information about the scope of this system is available at:

<https://intranet.secure.griffith.edu.au/teaching/academic-integrity-staff>

The University of Sydney

The University's *Academic Misconduct and Plagiarism Taskforce* recommended a consistent and searchable recordkeeping system be introduced across the institution. Part 1 of their reporting provides what they consider as a best practice example, currently in place within part of the University, using the TRIM records management system, with the potential to be readily expanded (see p. 20). See

<http://www.smh.com.au/cqstatic/givnzv/Taskforce.pdf>

Checklist Questions for UQ

Does UQ have administrative systems and practices in place that are strong and clear enough that students are appropriately and consistently punished for cheating?

Are there any gaps given the contemporary nature of serious academic misconduct?

Is it possible for UQ to keep records of students who have been investigated so they can be cross-matched with each new investigation request?

Building an institutional culture of integrity and encouraging honour codes

Evidence presented by Eriksson and McGee (2015) indicates that policies and punishment are not enough to combat academic misconduct. They suggest universities should focus on the students' ethical decision-making by embedding moral education into curricula and educating students that academic dishonesty cannot be justified by situational influences. Hughes and McCabe (2006) suggest that universities should be involved in 'the development of citizenship behaviours' for the betterment of society (p. 51). As such, academic integrity is not just the absence of dishonesty but rather a commitment to the values of 'honesty, trust, fairness, respect, responsibility and courage' (International Center for Academic Integrity 2016; Hughes & McCabe 2006). According to McCabe, Trevino and Butterfield (2001, p. 228) academic dishonesty is most effectively dealt with by creating an 'ethical community' with explicit policies, rules, and standards that are known and respected by all community members.

The introduction of honour codes has been a key strategy used historically to encourage an institutional culture of academic integrity. A large-scale seminal survey with 6,096 responses across 31 institutions by McCabe and Trevino in 1990 found self-reports of cheating lower in universities with honour codes (McCabe & Trevino 1995). McCabe, Trevino and Butterfield (1999) report that:

Although honor code students feel the same pressures from the larger society as their non-code colleagues, they are significantly less likely to use such pressures to rationalize or justify their own cheating. Rather, they refer to the honor code as an integral part of a culture of integrity that permeates their institutions (p. 230).

Research reported by McCabe, Trevino and Butterfield (2001) suggests that the impact of an honour code can extend to their professional roles in the workplace. Of course, there are limitations to the deterring influence of an honour code if the institutional policy environment and organisational culture do not align with its intent (McCabe 2005).

UQ has a Student Charter (see PPL 3.60.01) which outlines what is and is not appropriate for students in terms of their rights and responsibilities. It does not make any statements about potential punishments or consequences for misbehaviour.

Example honour codes for other organisations are more explicit about the consequences of misconduct. For example, the Stanford University honour code was developed after a student-driven campaign in 1921. It is updated on occasion. It stipulates the punishments for students who are caught violating the code. The standard punishment for a first-time offense is a one quarter suspension from the university and 40 hours of community service. In addition, most violations

attract a no-pass or no-credit notice for the course in question. Further violations attract harsher penalties <https://ed.stanford.edu/academics/masters-handbook/honor-code>

Examples of student-driven honour codes can also be seen at Bryn Mawr College and Macquarie University.

<http://sga.blogs.brynmawr.edu/honor-board/honor-code/>

<http://teche.ltc.mq.edu.au/wp-content/uploads/2014/09/AIMA-Leaflet.pdf>

Checklist Questions for UQ:

Is the academic integrity culture of the University satisfactory? How could it be improved?

Is the Student Charter at UQ sufficiently explicit about the consequences of misconduct and the importance of academic and personal integrity? Would student input to the Charter strengthen its effectiveness?

Educating students and staff

Bretag et al. (2014) report that breaches of academic integrity are not isolated events but rather common experiences that impact universities in multiple countries (see McCabe and associates 1990-2006; Brimble & Stevens-Clark 2005; Lin & Wen 2007; Dee & Jacob 2010). Work done by Dee and Jacob (2010) demonstrates that students have poor understanding of academic integrity and are not motivated to self-educate. In a large-scale student survey of over 15,000 students across six universities conducted by the *Academic Integrity Standards Project: Aligning Policy and Practice in Australian Universities 2010-2012*, 89.2 per cent of respondents agreed they had received sufficient information about academic integrity. Despite this high level of awareness, only 68.2 per cent thought that they had received sufficient support and training to avoid breaches (<http://www.aisp.apfei.edu.au/content/research-findings>). These results suggest that increasing educational intervention to support students in academic integrity decision-making and practices may be a positive way to address this situation.

While Bretag et al. (2014) found a low number of student respondents with personal experience of the process for breaching assessment integrity (only 1.3 % of 201 respondents), of that percentage, international students were disproportionately represented. When compared with domestic students, international students reported:

Three times as many notifications about an academic integrity issue that needed to be investigated, twice as many meetings with a member of university staff about an academic integrity breach, and more than twice as many incidents of receiving a penalty (pp.1165-1166).

Students are not the only ones who are incompletely informed about academic integrity. A survey about academic integrity by Henderson et al. (2013) garnered over 430 academic responses. The results showed staff were not always clear about scope of the term 'academic integrity' and were unsure how to educate others or address integrity breaches. These results may not speak to the situation at UQ, however they do remind us that there is a place for explicit guidelines for both students and staff about what constitutes academic integrity and what does not.

Checklist Question for UQ

UQ currently has an online education module ‘UQ Academic Integrity Tutorial’ which is optional to complete. Are there ways this strategy could be strengthened to be part of a multi-dimensional University solution?

Strengthening assessment design for student identify verification

Assessment practices can be strengthened to reduce ambiguity about student authorship. Assessment redesign is essential, according to Lancaster and Clarke (2008) so students who use contract-cheating services can only pass a small percentage of the total assessment in a course or program. There is an increasing scholarly interest in ‘assessment design-based prevention’ drawing on ‘student personal experiences, on individualised assignments’ and ‘scaffolded’ tasks that take time and regular consultation with the academic to complete (The University of Sydney 2015, pp. 17-18).

Student identify-verification in both face-to-face and online assessment becomes an important strategy in a University’s armour. Table Two briefly outlines possible student authentication options for use in assessment.

Table Two: Potential University Authentication Strategies

<i>Low Level Authentication Measures</i>		<i>High Level Authentication Measures</i>	
Password authentication	To access online resources in LMS	Biometric authentication	Scanning fingerprints, facial recognition
Instructor validation (large groups)	Difficult to track student progress with large classes	Instructor validation (supervised study)	Interaction with teacher
IP monitoring/login pattern analysis	Not necessarily reliable in determining if there is a problem	Proctoring (traditional)	Validating documents, supervision
Plagiarism detection (similar content)	Such as Turnitin	Proctoring (remote)	Use of cameras
Browser lock-down	Used for online testing to limit use of other screens	Student Identity Questions (online)	A bank of MCQs about personal history must be answered correctly

Source: Adapted from Amigud (2013) and WCET (2008)

Lancaster and Clarke (2008) offer some practical suggestions of how authentication could be improved through

- A final exam that requires students to improve and/or reflect on an already written task
- Viva or oral exams about course content or submitted assessments
- Creating new versions of an assessment task every time they are required
- Developing individualised versions of the task
- Log books that are regularly checked

Fisher et al. (2016) suggest:

- Large question banks that are randomized by the LMS so each student has an individualised exam
- Randomising the order of the questions so each student has different set.
- Encourage academics to set their own tests rather than using publisher test banks that accompany textbooks.
- 'Live' proctoring for off campus exams where student creates a baseline authentication profile before accessing the exam, then proctor enters password and can monitor student via webcam or computer.
- 'Video' proctoring with some software systems flagging certain behaviour to be followed up later.

Other options include:

- Use of mandatory ePortfolios
- Project-based or contextualised assessments (Amigud 2013)
- Application of knowledge to an unseen scenario (The University of Sydney 2015)

Of course, the faculties and committees within UQ have also provided suggestions on how they can verify student identity for assessment within their programs. One option is the use of Identity Verified Assessment with Hurdles (see Section 4.1.2 of PPL 3.10.02 Assessment). The UQ Teaching and Learning Committee has recently agreed to strengthen this part of the PPL to increase students' accountability without stifling creativity. A number of UQ faculties have already adopted a minimum attainment standard for individual verified assessment components in courses (see the two Case Studies below).

Case Study 1: Faculty of Science, UQ (Professor Peter Adams)

1) What is the individual identity verified assessment with hurdle (IIVAH) you use in the Faculty of Science? The following rule was introduced about four years ago: unless an exemption is granted, each course must include an item of IIVAH with a minimum attainment of 40% of the marks for the item in order to pass the course.

2) Why did you decide to implement IIVAH? We had noticed a number of students were performing very highly on assessment items that were not individual, identity verified (IIVA), and then performing very poorly on items that were IIVA. We were concerned that some of these cases could have resulted from improper group work or academic misconduct, and that others might have resulted from students disengaging with course learning and assessment, perhaps because they had already achieved a passing grade from the aggregate of earlier assessment pieces.

3) What sort of assessment items do you allow as IIVAH? Vivas, presentations, supervised exams, supervised laboratory projects, oral assessment, performances, etc.

4) What has been the effect on student grades? Overall, there was a small reduction in student grades, with a somewhat higher failure rate. This could have arisen from a range of factors.

5) Have you seen any effects on student behaviour as a result of IIVAH? Have you had comments or feedback from students about the system? We have anecdotal evidence that students are overall taking assessment items more seriously. I am not aware of any complaints as such, but have heard students comment that they need to work harder on the assessment than in some other discipline areas.

6) Have you had any comments or feedback from academics and administrators in your faculty about IIVAH? There was initially some resistance from one school, but this has faded, and now the system is generally regarded very positively.

7) Do you allow exemptions for any courses? If so, what are the conditions under which exemptions are allowed? Exemptions are allowed if a course coordinator makes a compelling case, such as courses in which group work forms the essence of the course learning objectives, or if the course contains a very high proportion of IIVA, so the hurdles are implicitly included with standard grade cutoffs.

Q8: Do you have any other comments to make about the IIVAH system? No

Case Study 2: Faculty of Engineering, Architecture, and Information Technology, UQ (Assoc/Prof Peter Sutton)

1) What is the individual identity verified assessment with hurdle (IIVAH) you use in EAIT? From Semester 2, 2015, all EAIT Courses must include a component of 'Identity Verified Assessment' (IVA) that is unambiguously completed by that student to a specific standard in order to obtain an overall passing grade for the course. Course coordinators have discretion to set the minimum standard, but it is expected that this will not be less than 40% (and may be higher than 40%). A statement of the minimum standard to be achieved on an examination in order to pass the course overall must be included in all relevant course profiles as from Semester 2 2015. Where invigilated individual examinations contribute 30% or more to the determination of the final grade, IVA will be realised by requiring a minimum standard be achieved on the examination in order to pass the course overall. In a small number of cases it may not be academically feasible or appropriate to include IVA. In such cases, exemptions can be approved by the EAIT AD(A).

The AD(A) expects the guideline above to be followed until the Faculty TLC decides otherwise or a University policy is introduced. Any hurdle can apply across multiple IVA items (e.g. a combination of exam marks rather than one or more individual exam marks). The hurdle can also be implicit where identity verified assessments make up most of the assessment in a course, e.g. if a course has identity verified exams worth a total of 90% then an explicit hurdle is probably not needed since the student probably needs to achieve at least 40 out of 90 to pass the course anyway.

2) Why did you decide to implement IIVAH? The guidelines were introduced in response to the April 2015 resolution from the UQ TLC "(a) that in principle support be given to development of the proposal [by Assessment Subcommittee] that courses include an individual 'Identity Verified Assessment' that was unambiguously completed by that student to a specific standard in order to obtain final grades; (b) that in a small number of cases it may not be academically feasible or appropriate. In such cases, exemptions could be granted by the school or faculty teaching and learning committee, or similar;" The issue was discussed by the EAIT TLC in May 2015 which resulted in the guidelines from Q1 being approved and promulgated.

3) What sort of assessment items do you allow as IIVAH?

The current list is

- Invigilated individual exams (student IDs must be checked)
- Individual seminars or presentations
- Thesis, group, or studio projects where teaching staff monitor student progress over the semester and can be sure that students are completing their own work.

4) What has been the effect on student grades? No obvious changes (with only one semester of data). Many course coordinators had already implemented hurdles anyway so it is expected that the new IVA system would only have affected a small number of additional students. From personal experience the AD(A) states that at most only a few percent of students would fail a course just because of the hurdle. (Many students miss the hurdle but fail because of their overall performance anyway.)

5) Have you seen any effects on student behaviour as a result of IIVAH? Have you had comments or feedback from students about the system? EAIT has no data on this yet. The AD(A) has not personally had any comments or feedback from students.

6) Have you had any comments or feedback from academics and administrators in your faculty about IIVAH? There have not been academic or administrator comments to the AD(A) after the EAIT TLC discussion. One original concern was around group project courses and studio courses (especially in Architecture) but in almost all of these cases the teaching staff actively monitor student progress over the semester, so these are considered as IVA and there is no issue.

7) Do you allow exemptions for any courses? If so, what are the conditions under which exemptions are allowed? Yes exemption is allowed upon approval by the AD(A). This was only sought for one course in Semester One 2016. This was a capstone course; it involved a group project in which teaching staff monitored student contributions to a group piece at weekly meetings. The exemption request was that no hurdle applied to the 15% final exam because it was mostly used to separate out the 6 and 7 students. (The exemption probably need not have been sought since a 15% exam is not covered by the guidelines.)

8) Do you have any other comments to make about the IIVAH system?

The AD(A) has some concerns from an administrative perspective:

- The AD(A) assumes that compliance with the EAIT guideline is being checked during course profile review within schools
- The AD(A) assumes that course coordinators are actually implementing the hurdles that they specify in course profiles
- The AD(A) assumes that exam supervisors always check IDs in invigilated school-based exams
- Everyone in EAIT (and the rest of the University) is assuming that students aren't using fake IDs.

This approach does have an effect on pedagogy and it may be at odds with the philosophy of education held by different disciplines or the learning objectives of a particular course. In cases where students participate actively in on-campus (or identity-verified) activities, such hurdles become less important, as assessors know that students are personally completing tasks. For online courses, or courses with large cohorts and few student-assessor contact opportunities, identity-verified assessment is crucial.

Another option is the use of integrity risk evaluation frameworks by course coordinators. Such a framework, called the 'Academic Integrity Plan' has been recently recommended at the University of Sydney (The University of Sydney 2015). This tool provides a mechanism by which to map the vulnerability of assessment items to student dishonesty. Consequently, course coordinators are able to make informed decisions about the likelihood of their course assessment being rigorous and reflective of the students' true abilities.

Checklist Questions for UQ

Should UQ introduce a risk-analysis matrix (Academic Integrity Plan) for assessment at the course level?

**Do we see value in embedding systems of student identity verification with UQ assessment?
If so, what would be the best way to do that?**

Investigate technological solutions and monitor innovation progress

As the 'high-tech' end of cheating options available to students is rapidly growing in sophistication there is a need for universities to keep abreast of new developments. Matching software has been a stalwart of the integrity process for many universities, but *Turnitin* (used at UQ) cannot detect personalised work delivered by contract cheating sites. In addition, students are finding ways to evade Turnitin and these methods are advertised online (see an example at <https://www.linkedin.com/pulse/cheat-turnitins-algorithm-avoid-plagiarism-giuseppe-macario>). UQ students are using these methods - one UQ Integrity Officer reported to us that their school is now seeing around ten per cent of Turnitin assignments that give a zero match to the Turnitin archive (and that this percentage is increasing each year). The school does not have the technical knowledge to fully investigate the mechanisms that students are using to produce this result. The result has been reported to ITS, who are investigating, and the support from the central unit is appreciated.

Turnitin evasion is one technological issue that the University faces, but as UQ moves to offer more online material and electronic examinations, we need to consider how we will authenticate the students who are completing work for credit. Online authentication can be achieved through biometrics (e.g. key stroke technology, face and/or fingerprint authentication), GPS location detection, the use of motion detection and 360 degree cameras, and software that streamlines students' access to computer software. These avenues are all being explored across institutions as potential options for validating the identity of an online student. The UQ Assessment Sub-Committee is currently investigating *Cadmus*, a technological solution that uses biometrics currently being trialled at the University of Melbourne. A working party has been established to inform a trial of *Cadmus* at UQ in the near future.

Technology, and the use of technology is always improving. As an example, Fisher et al. (2016) recently presented promising results from a trial of authentication software. Although we can be sure that authentication methods will continue to develop, the dishonest student's ability to evade or subvert detection technology will also evolve. Indeed, similar to our findings in researching for this issues paper, Fisher et al. (2016) suggest a multi-faceted approach to maintaining integrity of assessment. They propose that robust institutional policies, including severe penalties for contract cheating, need to be in place and embedded into course documentation. They also suggest that (i) students be required to sign off on work as being their own; (ii) specialised staff are employed to support academics in the time consuming misconduct processes; (iii) staff should be encouraged to pursue breaches; (iv) students should be educated about the risks of using contract cheating services; (v) penalties should be enforced; (vi) assessment should be non-generic, so that students must draw on personal experience to complete it; and (vii) technological authentication should be included where applicable.

Checklist Question for UQ:

Is ITS able to provide more support to staff members who suspect breaches in academic integrity?

Concluding Comments

It is essential that a university is able to vouch for the integrity of its assessment processes. Academic misconduct undermines the reputation of a university and its graduates, the education and personal development of the student body, and the morale of the academics. Counteracting academic misconduct is complex and it consumes resources, yet we cannot yield ground and accept the idea that cheating should be normalised and accepted.

Integrity remains important in the collective consciousness of Australian universities. *Universities Australia* is convening a gathering of Chairs of Academic Boards to discuss academic integrity, and academic integrity was the focus of a recent session at the *Office for Learning and Teaching (OLT)* 2016 meeting. At this OLT session Tracey Bretag reiterated the need for a holistic approach that includes detection technology, coupled with personalised assessment design, and a clear, consistent institutional policy on cheating. She also pointed out the value of publicity and ‘scandal’ around cheating, because it creates institutional awareness, drives policy responses, and shocks universities into sharing data in order to combat a shared problem. Both Griffith University and the University of Sydney have moved to make data on cheating more available and more useful by combining the efforts of their academics, their record-keepers, and their IT staff. UQ can do the same. As Tracey Bretag said, ‘I hope universities stop worrying about their own individual reputations and start worrying about the sector as a whole’.

Most UQ students are honest and hard-working. As an institution UQ has a duty to serve these students by catching and punishing cheats. We must support academics as they design, deliver, and enforce quality assessment for our graduates. The community needs to be able to trust UQ graduates, and our graduates need to be proud of their UQ heritage. Above all, we should reinforce the value and importance of earned academic attainment because an earned degree, not a bought one, is the core outcome of a university education.

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Appendix A: Media Articles about Student Misconduct in Assessment

'Queensland university students allegedly caught cheating, bribing examiners and bullying staff' – The Courier-Mail, Aug 31, 2013

<http://www.couriermail.com.au/news/queensland/queensland-university-students-allegedly-caught-cheating-bribing-examiners-and-bullying-staff/story-fnihsrf2-1226707722649>

'Students enlist MyMaster website to write essays, assignments' – The Sydney Morning Herald, Nov 12, 2014

<http://www.smh.com.au/national/education/students-enlist-mymaster-website-to-write-essays-assignments-20141110-11k0xg.html>

'MyMaster university cheating scandal referred to national regulator' – The Sydney Morning Herald, Nov 14, 2014

<http://www.smh.com.au/national/education/mymaster-university-cheating-scandal-referred-to-national-regulator-20141114-11n0lo.html>

'University essay cheating scandal rises from chase for the foreign student dollar' – The Sydney Morning Herald, Nov 15, 2014

<http://www.smh.com.au/national/education/university-essay-cheating-scandal-rises-from-chase-for-the-foreign-student-dollar-20141114-11mmi3.html>

'Sunday Explainer: The essay factory helping students cheat' – The Sydney Morning Herald, Nov 16, 2014

<http://www.smh.com.au/national/education/sunday-explainer-the-essay-factory-helping-students-cheat-20141114-11myoy.html>

'Sydney University to crack down on cheating following MyMaster investigation' - The Sydney Morning Herald, April 13, 2015

<http://www.smh.com.au/nsw/sydney-university-to-crack-down-on-cheating-following-mymaster-investigation-20150413-1mju3q.html>

'The lengths university students will go to cheat' – The Sydney Morning Herald, Aug 11, 2015

<http://www.smh.com.au/national/education/the-lengths-university-students-will-go-to-cheat-20150811-giwjog.html>

'Brisbane uni student accused of hacking into marking system to improve his grades' – ABC News, Nov 25, 2015

<http://www.abc.net.au/news/2015-11-25/university-queensland-student-charged-hacking-improve-grades/6972990>

'Law student who allegedly hacked University of Queensland to improve grades appears in court' – ABC News, Dec 1, 2015

<http://www.abc.net.au/news/2015-12-01/student-allegedly-caught-hacking-into-uq-computer/6990230>

'Sydney University, University of NSW and UTS crack down on cheating students', The Sydney Morning Herald, April 25, 2016

<http://www.smh.com.au/national/education/universities-crack-down-on-cheating-students-20160421-gobq1m.html>

Thai university students caught using spy cameras, smartwatches to cheat on medicine exam' ABC News, May 10, 2016

<http://www.abc.net.au/news/2016-05-10/thai-medical-students-caught-in-high-tech-plot-to-cheat-on-exam/7399728>

Appendix B: List of Checklist Questions for UQ

- Are UQ policies up-to-date in order to be:
 - (i) Relevant and responsive to addressing new forms of contract cheating and plagiarism,
 - (ii) Relevant and responsive to new student behaviours associated with such cheating, and
- Inclusive of all student cohorts?
- Does UQ adequately provide support for academics who need to spend time investigating misconduct cases?
- Does UQ know how many students are suspected of cheating vs how many are investigated?
- Would more support increase the amount of misconduct reported and improve academic morale around investigating student dishonesty?
- Would schools or faculties benefit from administrative help to collect evidence associated with cheating (or which suggests cheating) to help academics build a case against dishonest students? If so, should this administrative help be centralised or embedded in the schools or faculties?
- Does UQ have administrative systems and practices in place that are strong and clear enough that students are appropriately and consistently punished for cheating?
- Are there any gaps given the contemporary nature of serious academic misconduct?
- Is it possible for UQ to keep records of students who have been investigated so they can be cross-matched with each new investigation request?
- Is the academic integrity culture of the University satisfactory? How could it be improved?
- Is the Student Charter at UQ sufficiently explicit about the consequences of misconduct and the importance of academic and personal integrity? Would student input to the Charter strengthen its effectiveness?
- UQ currently has an online education module 'UQ Academic Integrity Tutorial' which is optional to complete. Are there ways this strategy could be strengthened to be part of a multi-dimensional University solution?
- Should UQ introduce a risk-analysis matrix (Academic Integrity Plan) for assessment at the course level?
- Do we see value in embedding systems of student identity verification with UQ assessment? If so, what would be the best way to do that?
- Is ITS able to provide more support to staff members who suspect breaches in academic integrity?